Gina Harrison

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January 30, 1995

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FEDERAL COMMUNICATIONS COMMISSION: OFFICE OF SECRETARY

William F. Caton **Acting Secretary** Federal Communications Commission Mail Stop 1170 1919 M Street, N.W., Room 222 Washington, D.C. 20554

DOCKET FILE COPY ORIGINAL

Dear Mr. Caton:

Re: ET Docket No. 94-124 - Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications

On behalf of Pacific Bell Mobile Services and Telesis Technologies Laboratory, please find enclosed an original and six copies of their "Comments" in the above proceeding.

Please stamp and return the provided copy to confirm your receipt. Please contact me should you have any questions or require additional information concerning this matter.

Sincerely,

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## Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

In the Matter of	)	
Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz	) )	ET Docket No. 94-124 RM-8308
for New Radio Applications	) )	DOCKET FILE COPY ORIGINAL

## COMMENTS OF PACIFIC BELL MOBILE SERVICES AND TELESIS TECHNOLOGIES LABORATORY

Pacific Bell Mobile Service and Telesis Technologies Laboratory

("Pacific") hereby comment on the Notice of Proposed Rulemaking in the abovecaptioned proceeding regarding the releasing of 18 GHz of spectrum above 40 GHz
for commercial development.<sup>1</sup>

We strongly support the Commission's proposal to allow commercial development in frequency bands proposed. New technologies are evolving that will be able to operate in these frequencies. The Commission proposes to allocate a total of 6.3 GHz for licensed uses and the remainder for unlicensed.<sup>2</sup> We have no

<sup>&</sup>lt;sup>1</sup> In the Matter of Amendment of Parts 2 and 15 of the Commission's Rules to Permit Use of Radio Frequencies Above 40 GHz for New Radio Applications, ET Docket No. 94-124, Notice of Proposed Rulemaking, released November 8, 1994 ("NPRM").

<sup>&</sup>lt;sup>2</sup> NPRM, para. 22.

objection to this division. The licensed services are named Licensed Millimeter Wave Service ("LMWS") and the following bands are allocated for licensed uses. 40.5-42.5 GHz, 47.4-48.2 GHz, 71.0-71.5 GHz, 84.0-84.5 GHz, 103.0-103.5 GHz, 116.0-116.5 GHz, 122.0-122,5 GHz, 126.0-126.6 GHz and 152.0-152.5 GHz.<sup>3</sup>

The 40.5-42.5 GHz band is particularly attractive because of the wide bandwidth. We recommend that the Commission permit at least 1 GHz of this band to be allocated for a service in the nature of local multipoint distribution service ("LMDS"). The block allocated for LMDS-like service should be equally divided between two carriers. We further recommend that satellite operations not be permitted in the band allocated to LMDS. As the Commission knows, the difficulties encountered in the rulemaking at 28 GHz provide ample evidence of the need for additional spectrum for LMDS unencumbered by satellite uses.<sup>4</sup>

The Commission proposes that the licensed bands be divided into two equal license blocks.<sup>5</sup> While we agree that broadband interests are important, we also believe that narrowband interests should not be excluded. We support some additional division in either the 40.5-42.5 GHz or the 47.4-48.2 GHz bands to

<sup>&</sup>lt;sup>3</sup> <u>Id.</u> We note the Table of Frequency Allocations in Appendix B does not correspond directly to the proposed allocation. The text contains a more specific allocation than what is reflected in Appendix B.

<sup>&</sup>lt;sup>4</sup> In the Matter of Rulemaking to Amend Part 1 and Part 21 of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band and to Establish Rules and Policies for Local Multipoint Distribution Service, CC Docket No. 92-297, Second Notice of Proposed Rulemaking, released February 11, 1994.

<sup>&</sup>lt;sup>5</sup> NPRM, para. 23.

accommodate some narrowband applications. For example, an application of point-to-point microwave links in blocks similar to the Commission's 38 GHz rules<sup>6</sup> would be appropriate in these bands also. As the Commission knows, many applications have been filed for the 38 GHz frequencies. However, as noted above, any subdivision of the 40.5-42.5 GHz block should provide at least 1 GHz for LMDS-like applications exclusively.

The Commission proposes that licensing areas will be the Rand McNally Major Trading Area (MTAs). These are very large areas. For example, in California, there are only two, the Northern and Southern California MTAs. We agree such large areas are appropriate for such wideband uses as LMDS service. However, for some of the narrowband applications, smaller areas such as the Rand McNally Basic Trading Areas ("BTAs) may be more appropriate. We urge the Commission to carefully consider what service area is most appropriate given the bandwidth available in a given frequency band.

We agree with the Commission's proposal to limit each LMWS licensee to a single spectrum block in each band in the same area if there are only two blocks in a band. However, if the bands are subdivided into numerous blocks, competition would not be threatened by a licensee having more than one block. Nevertheless, a cap on the number of blocks per licensee would be appropriate based on the number of blocks available in any one band.

<sup>&</sup>lt;sup>6</sup> 47 CFR 21.701(j).

<sup>&</sup>lt;sup>7</sup> NPRM, para. 24.

The Commission proposes using auctions to award LMWS licenses in cases of mutual exclusivity stating that "thus licensees would have much less incentive to engage in uneconomic warehousing or other forms of speculation." The Commission also tentatively concludes that in the interest of flexibility it will decline to impose mandatory build out requirements and transfer restrictions. While the lack of transfer restrictions and build-out requirements will increase the licensee's flexibility, it may also encourage speculators to enter the auction. In addition, the Commission proposes a simultaneous auction because licenses in one band may be close substitutes for those in other bands and the value of licenses in one area may be dependent on licenses in another area. We agree that this may be true.

We do not oppose auctions, but we remain concerned about the warehousing of spectrum for which technology is still in a very early developmental stage. Equipment that operates at these frequencies is virtually nonexistent or prohibitively expensive. Therefore, we recommend that the Commission consider imposing build-out requirements and transfer restrictions in order to discourage speculators from participating in the auctions. In addition, because LMDS-type applications appear to have such public interest benefits as providing schools with access to the information age, the Commission may want to include in its auction design incentives to promote such applications.

<sup>&</sup>lt;sup>8</sup> <u>Id.</u> at para. 25.

<sup>&</sup>lt;sup>9</sup> <u>Id.</u>

We also note that some uses of these frequencies may be for intermediate links. The Commission has declined to auction intermediate links which are communication links that are part of an end to end service but not one on which subscribers directly send or receive communications signals.<sup>10</sup> If the Commission decides that some of the licensed bands are primarily used for intermediate links, we urge them to apply its policy of not auctioning this spectrum.

The Commission also requests comment on whether there should be a requirement for coordination with the National Telecommunications Information Administration before issuance of the license, or whether coordination should be limited to operating on a shared basis. We support coordination of the licenses in a manner similar to the coordination under Section 21.100(d). Coordination provides for a more successful resolution of interference issues.

In the Matter of Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, Second Report and Order, 9 FCC Rcd 2348, paras. 40-44 (1994).

In conclusion, we support the Commission's proposal to open the millimeter wave frequency bands above 40 GHz for commercial development. The availability of this additional spectrum will stimulate the development of innovative technologies and benefit the public through the creation of new jobs and services.

Respectfully submitted,

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Date: January 30, 1995